Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of claims:

Claim 1 (Currently Amended). A method of producing a hot rolled steel sheet having a yield strength measured in a transverse direction of less than about 43 ksi, from molten steel, said sheet having increased formability and low slivering, the method comprising the steps of:

a) measuring the total nitrogen concentration of the molten steel , said total nitrogen concentration consisting of a first portion and a second portion of nitrogen;

b) adding a sufficient amount of titanium to the molten steel to bind with ~~a first~~ said first portion of the total nitrogen to form TiN, thereby leaving ~~a second~~ said second portion of total nitrogen;

c) adding a sufficient amount of boron to the molten steel to bind with the second portion of the total nitrogen to form BN; and,

d) hot rolling the steel.

Claim 2 (Currently Amended). ~~The method of claim 1~~ A method of producing a hot rolled steel sheet having a yield strength measured in a transverse direction of less than about 43 ksi, from molten steel, said sheet having increased formability and low slivering, the method comprising the steps of:

a) measuring the total nitrogen (N) concentration of the molten steel;

b) adding a sufficient amount of titanium (Ti) to the molten steel to bind with a first portion of the total nitrogen to form TiN, thereby leaving a second portion of total nitrogen;

c) adding a sufficient amount of boron (B) to the molten steel to bind with the second portion of the total nitrogen to form BN; and,

d) hot rolling the steel;

wherein the amount of Ti added is sufficient to reduce the amount of the second portion of total nitrogen to a concentration within the range of:

$$0.0005 \text{ wt\%} \leq N^{*} \leq 0.0025 \text{ wt\%}$$

where:

N^{*} is the second portion of total nitrogen and wherein:

$N^{*} = N_{tot} - (Ti/3.42)$;

Ntot is the total nitrogen as measured in wt%; and,

Ti is the amount of titanium added in wt%.

Claim 3 (Original). The method of claim 2 wherein the amount of N^{*} is about 0.0012 wt% to about 0.0022 wt%.

Claim 4 (Original). The method of claim 3 wherein the amount of boron added to the molten steel is about 0.0005 wt% to about 0.0025 wt%.

Claim 5 (Original). The method of claim 4 wherein the amount of boron added to the molten steel is about 0.001 wt% to about 0.002 wt%.

Claims 6 to 11 (Previously Canceled).

Claim 12 (Currently Amended). A method of producing a low yield strength hot rolled steel sheet having a yield strength measured in a transverse direction of less than about 43 ksi, from molten steel, said steel sheet having increased formability and low slivering, the method comprising the steps of:

a) measuring the total nitrogen concentration of the molten steel;

b) adding sufficient amounts of titanium and boron to the molten steel <u>such that said titanium and boron bind with the total amount of nitrogen contained in the molten steel, said titanium and boron being provided</u> in a proportion wherein the range of a stabilization ratio, SR corresponding to the relationship:

$$(B/0.77 + Ti/3.42)/N_{tot}$$

is

$$0.7 \leq SR \leq 2$$

where:

N_{tot} is the total nitrogen as measured in wt%

and the range of the boron bound to nitrogen remaining after Ti addition, $B \times N^*$ is

$$0 \text{ wt\%}^2 < B \times N^* \leq 4.5 \times 10^{-6} \text{ wt\%}^2;$$

where:

$$N^* = N_{tot} - (Ti/3.42); \text{ and}$$

c) hot rolling the steel.